

A pair taken *in copulâ* at Biskra had the following measurements:—♂, snout to vent 124 millim.; ♀, 96.

4. *BUFO VULGARIS*, Laurenti; Boulenger, *loc. cit.* p. 159.

1 specimen, Algiers.

Family III. *HYLIDÆ*.

Genus *HYLA*, Laurenti.

5. *HYLA ARBOREA*, Linnæus; Boulenger, *loc. cit.* p. 159.

Var. *MERIDIONALIS*, Boettger.

1 ♀, Tlemçen; 1 ♂ & 1 ♀, Hammam Meskoutine, Province of Constantine.

Family IV. *DISCOGLOSSIDÆ*.

Genus *DISCOGLOSSUS*, Otth.

6. *DISCOGLOSSUS PICTUS*, Otth; Boulenger, *loc. cit.* p. 160.

2 ♂, Tlemçen, Province of Oran; 6, Hammam R'irha, Province of Algiers; 2, Algiers.

The condition of the tympanum in these specimens varies considerably, being distinct in some and wholly invisible in others. It thus supports M. Lataste's opinion, with which Mr. Boulenger agrees, that there is only one species of *Discoglossus*.

DESCRIPTION OF PLATE I.

Fig. 1. *Chalcides boulengeri*, nat. size.

Fig. 2. View of the upper surface of the head, twice nat. size.

Fig. 3. Side view of the head, twice nat. size.

Fig. 4. View of the upper surface of the head of *C. sepoides*, Audouin, twice nat. size.

Fig. 5. Side view of the head of the same species, twice nat. size.

Fig. 6. Upper surface of the head of *Vipera lebetina*, Linnæus, var. *deserti*, nat. size.

Fig. 7. Side view of the head of the same, nat. size.

2. On the Myriopoda and Arachnida collected by

Dr. Anderson in Algeria and Tunisia. By R. I. Pocock.

[Received January 11, 1892.]

The Myriopoda collected by Dr. Anderson during his stay in Algeria and Tunisia in the winter of 1890 and 1891 are referable to 21 species, one of which appears to be new. This, which I call *Brachydesmus insculptus*, seems to be very nearly related to a species that was described two years ago by Dr. Latzel from the Azores. This fact is of interest, inasmuch as it affords another link to the chain of affinity between the fauna of these islands and that of the Mediterranean district of the Palæarctic region.

The rest of the species are principally remarkable for the light

that they throw upon the synonymy of old-established but little-known species.

The only circumstance to be noticed here with respect to the Arachnida is the vast amount of variation shown by the sexes and young of the Scorpion, *Prionurus australis*.

ARACHNIDA.

The only species of this group obtained by Dr. Anderson are the following:—*Galeodes olivieri*, Simon, *Prionurus australis* (Linn.), *Buthus europæus* (Linn.), and *Buthus leptochelys* (Ehrb.). All of them are well-known N.-African forms, but I am not aware that *B. leptochelys* has been ere this recorded so far to the West.

The species were obtained at the following localities:—*Galeodes olivieri* between Biskra and Tuggurt; *Prionurus australis*, Dîrat, Biskra, Tuggurt; *Buthus europæus*, Algiers, Hammam Meskoutine, Hammam R'irha; *Buthus leptochelys*, Biskra.

CHILOPODA.

Fam. SCUTIGERIDÆ.

SCUTIGERA COLEOPTRATA (Linn.).

Hammam R'irha and Algiers.

Common in Madeira and in the southern parts of Europe.

Fam. LITHOBIIDÆ.

LITHOBIUS IMPRESSUS, C. Koch.

Kherrata, Constantine, Tunis, Hammam R'irha, Algiers.

Originally described from Algeria, but abundant in many parts of Italy.

LITHOBIUS CASTANEUS, Newport.

Algiers, Hammam Meskoutine, Hammam R'irha, Kherrata, Constantine.

This species was redescribed as *eximius* by Meinert; see Pocock, Ann. Mus. Genov. (2) ix. p. 63, 1890. It occurs also in S. Europe.

Fam. SCOLOPENDRIDÆ.

SCOLOPENDRA MORSITANS, Linn.

The North-African form of the cosmopolitan *S. morsitans* was described by Koch as *S. scopoliana* and by Newport as *S. algerina*. For the synonymy of *S. scopoliana* see Pocock, Ann. Mag. Nat. Hist. ser. 6, vii. pp. 51, 52.

SCOLOPENDRA ORANIENSIS, Lucas.

S. oraniensis, Lucas, Rev. Zool. 1846, p. 237; id. Expl. Sci. de l'Alg., Anim. Art. p. 344.

S. dalmatica, C. Koch, 1847, and other authors.

Hammam R'irha, Tunis.

At these localities Dr. Anderson obtained three examples of

a species of *Scolopendra*, which agree closely with Lucas's figure and description of *S. oraniensis*, and at the same time are not specifically distinguishable from the S.-European *S. dalmatica*; Lucas's name must consequently supersede that of Koch.

The two specimens captured at Hammam R'irha are smaller and very dark-coloured, being an exceedingly deep green. The Tunisian example, on the contrary, is very much paler and considerably larger.

CUPIPES GERVAISIANUS (Koch).

Hammam Meskoutine.

It is needless to repeat here the involved synonymy of this species. It may be found at length in my paper in the Ann. Mag. Nat. Hist. ser. 6, vii. pp. 51-53.

This species also occurs in S. Europe.

OTOSTIGMA SPINICAUDA (Newport).

Branchiostoma spinicauda, Newp. Tr. Linn. Soc. xix. p. 412.

Otostigma deserti, Meinert, Vid. Medd. Nat. Forening, 1886, p. 121.

Biskra.

The above-given synonymy was published by me before it had been my good fortune to examine a specimen of this species from the locality where the types of *O. deserti* were obtained. Dr. Anderson, however, has supplied the missing link in the chain of evidence by procuring a specimen from Biskra. This example is undoubtedly co-specific with Newport's types of *B. spinicauda* and also with those that Meinert described as *O. deserti*.

This species is not known to occur in Europe.

CRYPTOPS ANOMOLANS, Newp.

Constantine.

This species is the *punctatus* of Koch and all authors; see my paper on the Chilopoda of Liguria, in the Ann. Mus. Genov. (2) ix. p. 68 (1890). It is probably also the same as the species Lucas described as *C. numidicus*; but to this last were assigned only 12 antennal segments.

Fam. GEOPHILIDÆ.

ORYA BARBARICA, Gervais.

Constantine, Kherrata, Hammam Meskoutine.

HIMANTARIUM RUGULOSUM, Koch.

Algiers.

HIMANTARIUM MEDITERRANEUM, Mein.

Constantine.

GEOPHILUS PUSILLUS, Mein.

Algiers.

GEOPHILUS FERRUGINEUS, Koch.

Hamman Meskoutine.

DIPLOPODA.

Fam. GLOMERIDÆ.

GLOMERIS FUSCO-MARMORATA, Lucas.

Algiers, Hamman R'irha.

This species appears at most to be but a variety of the S.-European *G. conspersa*.

GLOMERIS FLAVO-MACULATA, Luc.

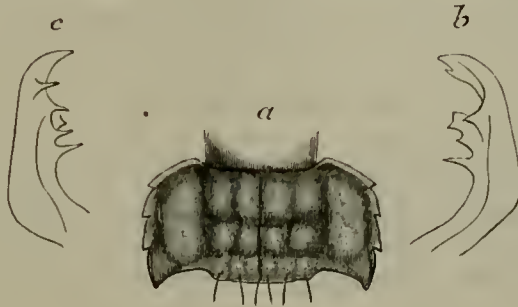
Hamman R'irha.

This species also is most probably but a variety of the European *G. connexa*.

Fam. POLYDESMIDÆ.

BRACHYDESMUS INSCULPTUS, sp. n.

Colour pale brown or ochraceous. Moderately robust. Antennæ much longer than the width of the body. The first tergite sub-



a. *Brachydesmus insculptus*, sp. n. ; 8th tergite from above.
b. " " " copulatory foot, external view.
c. " " " " internal view.

carinate, marked with two transverse depressions, between which run two or three longitudinal grooves with an anterior row of 6 small tubercles, the posterior large tubercles very distinct; the rest of the tergites with the sculpturing very strongly marked, the grooves sharply defining the tubercles; the anterior angle of the keels obtuse but subdentate at the apex, the posterior angle acute and produced; the side margin of the pore-bearing keels tridentate, of the others bidentate (not including the anterior and posterior angles). Legs short and robust. Copulatory feet strong and falciform, narrower before the apex, which is curved; below the apex on the inside and on the outside there is a single process, and there are

three other processes and a membranous expansion on the posterior aspect of the appendage. Length up to 13 millim., width 1.6.

Closely allied to, if not identical with, *B. proximus* of Latzel from the Azores.

Hamam R'irha.

This is probably the species that Lucas records as *Polydesmus complanatus*.

STRONGYLOSOMA GUERINII, Gerv.

Strongylosoma guerinii, Gerv. Ann. Soc. Ent. Fr. iv. p. 686.

Hamam R'irha.

This species was originally described from Madeira, whence the British Museum has examples. It is widely distributed in the Atlantic Islands, occurring both in Teneriffe and the Bermudas.

I suspect that this is the species which Lucas identified as *S. pallipes* (Oliv.).

Fam. IULIDÆ.

IULUS FUSCO-UNILINEATUS, Lucas.

Kherrata, Hamam R'irha, Constantine.

IULUS DISTINCTUS, Lucas.

Constantine.

The synonymy of these two species of *Iulus* requires reinvestigation.

Fam. POLYZONIDÆ.

DOLISTENUS SAVII, Fanz.

Hamam R'irha.

This interesting Millipede is a great rarity. It has been found in Italy, but is new to the African shore of the Mediterranean. The repugnatorial pores begin on the fifth somite.

3. On the Earthworms collected in Algeria and Tunisia by Dr. Anderson. By FRANK E. BEDDARD, M.A., Professor to the Society.

[Received January 5, 1892.]

As nothing appears to be known of the Earthworms of the northern part of the African Continent, excepting Egypt, I am very glad to have had the opportunity, afforded me by Dr. Anderson's kindness, of examining a small collection made by him during the spring of last year in Algeria and Tunisia.

Earthworms show in so very plain a manner the effect of barriers to dispersal in their distribution, that I had expected to find the Algerian forms identical with or closely allied to those of Europe. The Earthworm-fauna of Central and South Africa is evidently very